

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2011 Levee Maintenance Deficiency Summary Report**

**Overall LMA & Unit Ratings, including USACE Erosion Survey**

**Sacramento River Basin**

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<b>MA0001</b>	Overall LMA Rating	Total LMA Miles				
<b>Sutter Maintenance Yard Maintenance Area 0001</b>	<b>A</b>	<b>17.12</b>				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Vegetation	0.04		0.04	0.23%		
Trim / Thin Trees	0.01		0.01	0.06%		
Encroachments	0.01		0.01	0.06%	1.20	0.44
Animal Control	0.23		0.23	1.34%		
Slope Stability	0.01		0.01	0.06%		
<i>Supplemental</i>						
USACE Erosion Survey	0.39		0.39	2.28%		
<b>LMA Totals:</b>	<b>0.69</b>	<b>0.00</b>	<b>0.69</b>	<b>4.03%</b>	<b>1.20</b>	<b>0.44</b>

**Flood Control Project Maintenance  
Levee Inspections**  
**LMA District Cover Sheet**  
**Fall 2011 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0001**

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	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			A	

\*\* Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

\*  
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports.

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2011 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway			Bank	Unit Miles
Unit No. 01 Sacramento River			Right	17.12
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			<b>A</b>	
Date of Inspection	4/11/2011 - 4/11/2011		10/27/2011 - 10/27/2011	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Bryan Reniff Sutter Yard		Bryan Reniff Sutter Yard	

Check one:

- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.
- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

**Comments**

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :

DWR Summer/Winter Inspection Reports  
3310 El Camino Avenue, Suite 200  
Sacramento, CA 95821-9000

**X**

Signature of LMA Representative

Date

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River							Right	17.12	10/27/2011 10/27/2011	Bob Duffey
LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1	0.04	0.23	Earthen Levee	Encroachments	LS	CO	Buildings	39.213988 ° -122.001537 °	39.215198 ° -122.004775 °	2
2	0.69	0.71	Earthen Levee	Encroachments	LS	CO	Buildings	39.216533 ° -122.012512 °	39.216680 ° -122.012907 °	7
3	0.80	0.95	Earthen Levee	Encroachments	LS	CO	Buildings	39.217282 ° -122.014290 °	39.218215 ° -122.016538 °	8
4	1.91	1.91	Earthen Levee	Animal Control	LS	M	Exterminate rodents and backfill and compact or grout burrows.	39.231183 ° -122.015413 °	39.231183 ° -122.015413 °	48
5	1.96	1.96	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.231897 ° -122.015438 °	39.231897 ° -122.015438 °	466 Y
6	2.03	2.03	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.232728 ° -122.014912 °	39.232728 ° -122.014912 °	467 Y
7	2.31	2.38	Earthen Levee	Encroachments	LS	PO	Fences	39.236327 ° -122.012727 °	39.237215 ° -122.012122 °	5
8	2.57	2.59	Earthen Levee	Trim / Thin Trees	LS	C	Trim and thin trees to allow visibility of the ground and room to flood fight.	39.239609 ° -122.010532 °	39.239846 ° -122.010246 °	6
9	2.57	2.59	Earthen Levee	Trim / Thin Trees	LS	A	Trim and thin trees to allow visibility of the ground and room to flood fight.	39.239609 ° -122.010532 °	39.239846 ° -122.010246 °	474 Y
10	2.58	2.60	Earthen Levee	Encroachments	LS	CO	Buildings	39.239750 ° -122.010390 °	39.239955 ° -122.010090 °	20 Y
11	2.66	2.70	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.240602 ° -122.009468 °	39.241092 ° -122.009312 °	468 Y
12	3.96	3.96	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	39.257125 ° -122.012648 °	39.257125 ° -122.012648 °	50
13	4.64	4.64	Earthen Levee	Animal Control	WS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.265503 ° -122.009280 °	39.265503 ° -122.009280 °	469 Y
14	4.89	5.25	Supplemental Survey	USACE Erosion Survey	WS	M	Inspector Comments: 2009 - Slump in the middle of the section has left a vertical section on the bank. 2010 - Old cobble site unraveling, site extended downstream. 2011: No observed change. [2011 Site ID: SAC_151-0_R]	39.265730 ° -122.014925 °	39.266315 ° -122.020682 °	11 Y
15	5.83	5.83	Earthen Levee	Slope Stability	WS	M	Repair the levee slope damaged by vehicle traffic and prevent access where possible.	39.271868 ° -122.023228 °	39.271868 ° -122.023228 °	1 Y
16	5.89	5.89	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	39.272773 ° -122.023290 °	39.272773 ° -122.023290 °	35
17	6.85	6.85	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.286117 ° -122.021570 °	39.286117 ° -122.021570 °	470 Y

**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable      PO : Partially Obstructing      N : Not Inspected, see Inspector Comment      C : Corrected  
M : Minimally Acceptable      CO : Completely Obstructing  
U : Unacceptable      W : Watch/Monitor

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	17.12	10/27/2011 10/27/2011	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
18	7.70	7.71	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2010 - Downstream end of 154.5, needs maintenance, small amount to erosion into the levee toe. 2011: Old cobble site starting to unravel. Some new minor erosion since last year. [2011 Site ID: SAC_154-0_R]	39.297714 ° -122.023728 °	39.297811 ° -122.023354 °	16 Y
19	7.87	7.87	Earthen Levee	Vegetation	WS	M	Elderberries are blocking visibility and flood fight capability.	39.297303 ° -122.025257 °	39.297303 ° -122.025257 °	52
20	9.54	9.54	Earthen Levee	Encroachments	LS	M	Prunings	39.317199 ° -122.030339 °	39.317199 ° -122.030339 °	10
21	10.35	10.35	Earthen Levee	Erosion / Bank Caving	WS	W	Note and monitor erosion site.	39.328697 ° -122.029262 °	39.328697 ° -122.029262 °	18 Y
22	10.46	10.46	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2004 - Slowly eroding but near vertical with no vegetation to hold it. 2005 - Erosion is close to levee toe but not into the levee section yet. 2010 - Some new toe scour. 2011: No observed change. [2011 Site ID: SAC_157-7_R]	39.331447 ° -122.029440 °	39.332716 ° -122.029953 °	17 Y
23	10.91	10.91	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.336025 ° -122.032562 °	39.336025 ° -122.032562 °	471 Y
24	11.25	11.25	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	39.340774 ° -122.032871 °	39.340774 ° -122.032871 °	13
25	11.25	11.25	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	39.340774 ° -122.032872 °	39.340774 ° -122.032872 °	12
26	12.00	12.05	Earthen Levee	Encroachments	LS	PO	Landscaping	39.351155 ° -122.030443 °	39.351832 ° -122.030295 °	23
27	12.33	13.38	Earthen Levee	Encroachments	LS	PO	Agricultural Ditch	39.355607 ° -122.028707 °	39.362600 ° -122.014497 °	4
28	13.56	13.56	Earthen Levee	Animal Control	LS	M	Exterminate rodents and backfill and compact or grout burrows.	39.364843 ° -122.015617 °	39.364843 ° -122.015617 °	9
29	13.59	13.65	Earthen Levee	Animal Control	LS	M	Exterminate rodents and backfill and compact or grout burrows.	39.365382 ° -122.015680 °	39.366147 ° -122.015570 °	472 Y
30	16.43	16.43	Earthen Levee	Encroachments	WS	CO	Buildings	39.403930 ° -122.008925 °	39.403930 ° -122.008925 °	14
31	16.45	16.45	Earthen Levee	Encroachments	LS	CO	Buildings	39.404135 ° -122.008797 °	39.404135 ° -122.008797 °	26
32	16.53	16.59	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.405260 ° -122.008627 °	39.405790 ° -122.008540 °	473 Y
33	16.65	16.68	Earthen Levee	Encroachments	LS	PO	Buildings	39.407066 ° -122.008730 °	39.407363 ° -122.008780 °	15

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 01 Sacramento River						Right	17.12	10/27/2011 10/27/2011	Bob Duffey	

LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
34	16.66	16.66	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: Erosion site added in 1997 and removed in 2005. 2009 - Site added back in, hard toe with slow moving erosion. Potential geotechnical failure. 2011: Site extended downstream. [2011 Site ID: SAC_164-3_R]	39.407837 ° -122.008763 °	39.411111 ° -122.009238 °	19 Y
35	16.66	16.69	Earthen Levee	Encroachments	LS	CO	Buildings	39.407225 ° -122.008570 °	39.407545 ° -122.008640 °	46
36	16.70	16.71	Earthen Levee	Encroachments	LS	CO	Fences	39.407670 ° -122.008685 °	39.407823 ° -122.008740 °	47

**\* Location**

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**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	17.12	10/27/2011 10/27/2011	Bob Duffey

Levee Mile Report Line	5
Start Levee Mile	1.96
End Levee Mile	1.96
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the L/S slope.

rduffey\_f\_20111208\_569.jpg



Levee Mile Report Line	6
Start Levee Mile	2.03
End Levee Mile	2.03
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the L/S slope.

rduffey\_f\_20111208\_570.jpg



Levee Mile Report Line	9
Start Levee Mile	2.57
End Levee Mile	2.59
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

View of the trees that has been sprayed along the L/S slope.

rduffey\_f\_20111208\_571.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	17.12	10/27/2011 10/27/2011	Bob Duffey

Levee Mile Report Line	10
Start Levee Mile	2.58
End Levee Mile	2.60
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of the house next to the levee.

rduffey\_f\_20110927\_794.jpg



Levee Mile Report Line	11
Start Levee Mile	2.66
End Levee Mile	2.70
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the L/S slope.

rduffey\_f\_20111208\_572.jpg



Levee Mile Report Line	13
Start Levee Mile	4.64
End Levee Mile	4.64
Location	Water Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the W/S slope.

rduffey\_f\_20111208\_573.jpg



<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	17.12	10/27/2011 10/27/2011	Bob Duffey

Levee Mile Report Line	14
Start Levee Mile	4.89
End Levee Mile	5.25
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #1

USACE2011\_SAC\_151-0\_R\_1.jpg



Levee Mile Report Line	14
Start Levee Mile	4.89
End Levee Mile	5.25
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #2

USACE2011\_SAC\_151-0\_R\_2.jpg



Levee Mile Report Line	15
Start Levee Mile	5.83
End Levee Mile	5.83
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

View of the erosion on the w/s slope.

rduffey\_f\_20110927\_790.jpg

**\* Location**

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	17.12	10/27/2011 10/27/2011	Bob Duffey

Levee Mile Report Line	17
Start Levee Mile	6.85
End Levee Mile	6.85
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes & bait station along the L/s slope.

rduffey\_f\_20111208\_574.jpg



Levee Mile Report Line	18
Start Levee Mile	7.70
End Levee Mile	7.71
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #1

USACE2011\_SAC\_154-0\_R\_1.jpg



Levee Mile Report Line	18
Start Levee Mile	7.70
End Levee Mile	7.71
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #2

USACE2011\_SAC\_154-0\_R\_2.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

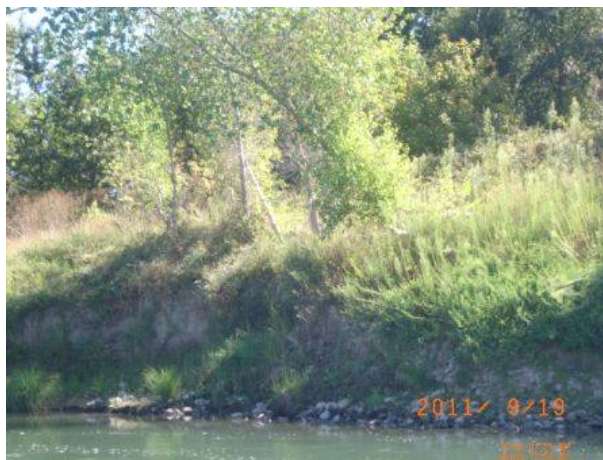
**Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	17.12	10/27/2011 10/27/2011	Bob Duffey

Levee Mile Report Line	18
Start Levee Mile	7.70
End Levee Mile	7.71
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #3

USACE2011\_SAC\_154-0\_R\_3.jpg



Levee Mile Report Line	21
Start Levee Mile	10.35
End Levee Mile	10.35
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the waterside of the levee.

rduffey\_f\_20110927\_793.jpg



Levee Mile Report Line	22
Start Levee Mile	10.46
End Levee Mile	10.46
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #1

USACE2011\_SAC\_157-7\_R\_1.jpg

**\* Location**

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WS : Water Side  
CR : Crown

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	17.12	10/27/2011 10/27/2011	Bob Duffey

Levee Mile Report Line	23
Start Levee Mile	10.91
End Levee Mile	10.91
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the L/S slope.

rduffey\_f\_20111208\_575.jpg



Levee Mile Report Line	29
Start Levee Mile	13.59
End Levee Mile	13.65
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the L/S toe.

rduffey\_f\_20111208\_576.jpg



Levee Mile Report Line	32
Start Levee Mile	16.53
End Levee Mile	16.59
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the L/S slope.

rduffey\_f\_20111208\_577.jpg



**\* Location**

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	17.12	10/27/2011 10/27/2011	Bob Duffey

Levee Mile Report Line	34
Start Levee Mile	16.66
End Levee Mile	16.66
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #1

USACE2011\_SAC\_164-3\_R\_1.jpg



Levee Mile Report Line	34
Start Levee Mile	16.66
End Levee Mile	16.66
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #2

USACE2011\_SAC\_164-3\_R\_2.jpg



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